

IN THE CLAIMS:

The content and status of the claims are as follows. *No amendments to the claims are proposed by the present paper.*

1. (previously presented) A method for producing an oral medication comprising:
with an inkjet dispenser, dispensing a structural material, said structural material including one of a polymer or a gelatin;
curing said structural material;
with said inkjet dispenser, dispensing a jettable pharmaceutical solution onto said cured structural material; and
dispensing alternating layers of said structural material and said pharmaceutical solution.

2. (cancelled)

3. (previously presented) The method of claim 1, wherein said inkjet material dispenser comprises one of a thermally actuated inkjet dispenser, a mechanically actuated inkjet dispenser, an electro-statically actuated inkjet dispenser, a magnetically actuated dispenser, a piezo-electrically actuated inkjet dispenser, or a continuous inkjet dispenser.

4. (previously presented) The method of claim 1, wherein said dispensing said structural material comprises:
selectively jetting said structural material from said inkjet dispenser;

said inkjet dispenser comprising one of a thermally actuated inkjet dispenser, a mechanically actuated inkjet dispenser, an electro-statically actuated inkjet dispenser, a magnetically actuated dispenser, a piezo-electrically actuated inkjet dispenser, or a continuous inkjet dispenser.

5. (original) The method of claim 1, wherein said step of curing said structural material comprises vacuum drying or thermally drying said structural material.

6. (cancelled)

7. (previously presented) The method of claim 1, further comprising curing said alternating layers of said structural material prior to dispensing said alternating layers of said pharmaceutical solution.

8. (original) The method of claim 1, wherein said structural material comprises one of a maltotriose-based pullulan, a gelatin, a polyvinyl alcohol (PVA), a PVA-polyethylene oxide, a PVA-vinylamine, a polyvinyl pyrrolidone (PVP), a PVP-polyvinyl acetate, a cationic PVP, a crosslinked PVP, a sorbitol, a wheat gluten, a seaweed, a cellulose, a methyl cellulose, a hydroxypropyl methyl cellulose (HPMC), a poly vinyl methyl ether (PVME), a PVME- propylene glycol monomethyl ether acetate (PMA), a poly (2-ethyl 2-oxazoline), or a pectin.

9. (previously presented) The method of claim 1, wherein said dispensing a structural material further comprises dispensing a plurality of selective quantities of said structural material onto discrete locations of a substrate.

10. (original) The method of claim 1, further comprising forming said jettable pharmaceutical solution.

11. (original) The method of claim 10, wherein forming a jettable pharmaceutical solution comprises:

presenting an oral drug component; and

combining an edible jettable vehicle component with said oral drug component.

12. (previously presented) The method of claim 11, wherein said oral drug component comprises one of an ace inhibitor, an antianxiety medication, an antibiotic, a antihypertensive medication, an antiviral medication, a blood glucose regulator, an Alzheimer-type dementia medication, an anorexiant, a central nervous system stimulant, an antidiuretic, an antidote, an antihistamine, an antipsychotic medication, an antimanic medication, a beta blocker, a calcium channel blocker, a contraceptive, a dermatologic, a diuretic, an estrogen, a progestin, an entrapyramidal movement disorder medication, a sedative, or a hypnotic medication.

13. (original) The method of claim 12, wherein said oral drug component further comprises one of triazolam, felodipine, trandolapril, pergolide, rivastigmine tartrate, sibutramine hydrochloride, desmopressin acetate, flumazenil, desloratadine, risperidone,

carvedilol, isradipine, norgestimate, methoxsalen, metolazone, estradiol, estrogens, conjugated estrogen, esterified cabergoline, zaleplon, or zolpidem tartrate.

14. (original) The method of claim 11, wherein said jettable vehicle component comprises a solvent.

15. (original) The method of claim 14, wherein said solvent is configured to dissolve said oral drug component.

16. (original) The method of claim 15, wherein said solvent is configured to partially dissolve said structural material.

17. (original) The method of claim 16, wherein said solvent comprises one of a water and methanol acetonitrile solvent, an acetone and dimethylsulfoxide (DMSO) solvent, a DMSO and methanol solvent, a DMSO and potassium chloride (KCl) and water solvent, a KCl and water solvent, water, a t-butanol and water solvent, an ethanol and water solvent, a methanol and water solvent, an I-propanol and water solvent, an n-propanol and water solvent, an NaCl and water solvent, a piperazine solvent, a diethylene-diamine solvent, a formamide solvent, a dimethylformamide (DMF), a DMSO solvent, a hexamethylphosphoric triamide solvent, a glycols solvent, a glycerol solvent, a dichloromethane solvent, a polar solvent, an acetone/water solvent, a dioxane solvent, an aqueous alkali solvent, a methanol/methylene chloride solvent, an N-ethylpyridinium chloride and DMF solvent, a chloroform solvent, an acetone solvent, a pyridine solvent, an ester solvent, a cyclohexanone

solvent, an N-ethylpyridinium chloride and pyridine solvent, a diluted acid solvent, or an ethylene diamine solvent.

18. (original) The method of claim 15, wherein said solvent is configured to not dissolve said structural material.

19. (original) The method of claim 18, wherein said solvent comprises one of an organic solvent, a hydrocarbon solvent, a chlorinated hydrocarbon solvent, a lower alcohol solvent, a tetrahydrofuran solvent, a ketone solvent, a carboxylic acid solvent, an ester solvent, salt solvent, a water solvent, a diethyl ether solvent, a methylene chloride solvent, an ethanol solvent, an aliphatic hydrocarbon solvent, a diluted aqueous alkali solvent, or an alcohol solvent.

20. (original) The method of claim 14, wherein said jettable vehicle component further comprises one of a humectant, a surfactant, a colorant, a drier, a thinner, a wax, a lubricant, a reducing oil, a solvent, a body gum, a binding varnish, an antioxidant, an anti-skinning agent, a resin, or a binder.

21. (previously presented) The method of claim 1, wherein said dispensing alternating layers of said structural material and said pharmaceutical solution is configured to control a release rate of said pharmaceutical solution.

22-53. (cancelled)

54. (previously presented) A method for forming a slow release dosage of oral medication comprising:

disposing a first layer of polymer based structural material adjacent to an inkjet dispenser;

jetting a jettable pharmaceutical solution onto said polymer based structural material with said inkjet dispenser, wherein said solution comprises a solvent for dissolving said solution into said structural material; and

depositing a second layer of polymer based structural material over said pharmaceutical solution; and varying a quantity of said first and second layer of polymer based structural material to vary a release rate of said pharmaceutical solution.

55. (cancelled)

56. (original) The method of claim 54, wherein said inkjet dispenser comprises one of a thermally actuated inkjet dispenser, a mechanically actuated inkjet dispenser, an electro-statically actuated inkjet dispenser, a magnetically actuated dispenser, a piezo-electrically actuated inkjet dispenser, or a continuous inkjet dispenser.

57. (original) The method of claim 54, wherein said polymer based structural material comprises one of a maltotriose-based pullulan, a gelatin, a polyvinyl alcohol (PVA), a PVA-polyethylene oxide, a PVA-vinylamine, a polyvinyl pyrrolidone (PVP), a PVP-polyvinyl acetate, a cationic PVP, a crosslinked PVP, a sorbitol, a wheat gluten, a seaweed, a cellulose, a methyl cellulose, a hydroxypropyl methyl cellulose (HPMC), a poly vinyl methyl

ether (PVME), a PVME- propylene glycol monomethyl ether acetate (PMA), a poly (2-ethyl 2-oxazoline), or a pectin.

58. (original) The method of claim 54, wherein said jettable pharmaceutical solution comprises:

an oral drug component; and

an edible jettable vehicle component combined with said oral drug component.

59. (cancelled)

60. (previously presented) The method of claim 58, wherein said solvent is configured to dissolve said oral drug component.

61. (cancelled)

62. (previously presented) The system of claim 54, wherein said solvent comprises one of a water and methanol acetonitrile solvent, an acetone and dimethylsulfoxide (DMSO) solvent, a DMSO and methanol solvent, a DMSO and potassium chloride (KCl) and water solvent, a KCl and water solvent, water, a t-butanol and water solvent, an ethanol and water solvent, a methanol and water solvent, an I-propanol and water solvent, an n-propanol and water solvent, an NaCl and water solvent, a piperazine solvent, a diethylene-diamine solvent, a formamide solvent, a dimethylformamide (DMF), a DMSO solvent, a hexamethylphosphoric triamide solvent, a glycols solvent, a glycerol solvent, a dichloromethane solvent, a polar solvent, an acetone/water solvent, a dioxane solvent, an

aqueous alkali solvent, a methanol/methylene chloride solvent, an N-ethylpyridinium chloride and DMF solvent, a chloroform solvent, an acetone solvent, a pyridine solvent, an ester solvent, a cyclohexanone solvent, an N-ethylpyridinium chloride and pyridine solvent, a diluted acid solvent, or an ethylene diamine solvent.

63-79. (cancelled)

80. (previously presented) The method of claim 54, further comprising dispensing a second layer of polymer based structural material over said jettable pharmaceutical solution.

81. (previously presented) The method of claim 54, further comprising controlling a quantity of said solvent to control release characteristics of said pharmaceutical solution.

82. (previously presented) The method of claim 54, further comprising varying said solvent to control release characteristics of said pharmaceutical solution.

83. (previously presented) The method of claim 54, further comprising adding a surfactant or emulsifier to said solvent.

84. (previously presented) The method of claim 54, further comprising adding a humectant to said solvent.

85. (previously presented) The method of claim 54, further comprising heating said inkjet dispenser.

86. (previously presented) The method of claim 54, wherein disposing said first layer of structural material comprises depositing said first layer of structural material onto a non-adhesive substrate.

87. (previously presented) The method of claim 86, wherein said non-adhesive substrate comprises glass or polytetrafluorethylene.

88. (previously presented) The method of claim 54, wherein disposing said first layer of structural material comprises depositing said first layer of structural material onto an edible substrate.

89. (previously presented) The method of claim 88, wherein said edible substrate comprises a sheet of edible polymer.

90. (previously presented) The method of claim 89, wherein said edible polymer comprises pullulan, polyvinyl alcohol (PVA), polyvinyl pyrrolidone (PVP), calcium alginate, gelatin, or a combination thereof.

91. (previously presented) The method of claim 54, further comprising depositing a plurality of stacked, alternating layers of said structural material and said pharmaceutical solution.

92. (previously presented) The method of claim 1, wherein said pharmaceutical solution comprises a solvent that dissolves said pharmaceutical solution into said structural material, said method further comprising controlling a quantity of said solvent to control release characteristics of said pharmaceutical solution.

93. (previously presented) The method of claim 1, wherein said pharmaceutical solution comprises a solvent that dissolves said pharmaceutical solution into said structural material, said method further comprising varying said solvent to control release characteristics of said pharmaceutical solution.

94. (previously presented) The method of claim 1, wherein dispensing said structural material comprises depositing a first layer of structural material onto a non-adhesive substrate.

95. (previously presented) The method of claim 94, wherein said non-adhesive substrate comprises glass or polytetrafluorethylene.

96. (previously presented) The method of claim 1, wherein dispensing said structural material comprises depositing a first layer of structural material onto an edible substrate.

97. (previously presented) The method of claim 96, wherein said edible substrate comprises a sheet of edible polymer.

98. (previously presented) The method of claim 97, wherein said edible polymer comprises pullulan, polyvinyl alcohol (PVA), polyvinyl pyrrolidone (PVP), calcium alginate, gelatin, or a combination thereof.

99. (cancelled)